

Please amend the claims of the present application under the provisions of 37 C.F.R. §1.121(c). This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Currently Amended) A method of inspecting a printed paper on which images are printed repeatedly, the method comprising the steps of:

predetermining a first threshold (a) of lowest stained density near a first level (L1) of lowest printed density for inspection of stained parts;

predetermining a second threshold (b) of highest blurred density near a second level (L2) of highest printed density for inspection of blurred parts;

reading multi valued data of reference of each color from a printed paper, the multi valued data of reference being converted into monochrome data of reference by using the first and second thresholds (a, b) of lowest stained density and highest blurred density so that monochrome images of reference can be stored in a memory (24) from the monochrome data of reference;

reading multi valued data of inspection of each color from a printed paper which is fed when inspecting, the multi valued data of inspection being converted into monochrome data of inspection by using the first and second threshold (a, b) of lowest stained densities density and highest blurred density so that monochrome images of inspection can be stored in the memory (24) from monochrome data of inspection;

comparing the monochrome images of inspection with the monochrome images of reference for inspection of stained parts and blurred parts;

predetermining the first areas for decision of stained parts or blurred parts; recognizing whether the monochrome images of inspection include portions disagreeing with the monochrome images of reference or not, where the portions are positioned, and what areas the portions have, and deciding on stained parts or blurred parts when the portions have actual areas exceeding the first areas for decision of stained parts or blurred parts, the first areas comprising the a collection of adjacent disagreeing pixels;

predetermining a first limit (ϵ) of minus of differential density independently of the first threshold (a) of lowest stained density for inspection of shortage of printed density at every pixel, the first limit (ϵ) of minus of differential density being disposed above the first threshold (a) of lowest stained density;

predetermining a second limit (d) of plus or differential density independently of the second threshold (b) of highest blurred density for inspection of excess of printed density at every pixel, the second limit (d) of plus of differential density being disposed below the second threshold (b) of highest blurred density, the first and second thresholds and the first and second limits having different numerical values from one another;

comparing the multi-valued data of inspection with the multi-valued data of reference at every pixel for recognition of difference between the multi-valued data of reference and the multi-valued data of inspection;

predetermining second areas for decision of shortage or excess of printed density;

deciding on shortage or excess of printed density when the difference exceeds the first or second limit (ϵ, d) of minus differential density or plus differential density by

portions having actual areas which exceed the second areas for decisions of shortage or excess of printed density; and

executing the inspection and decision of stained parts and blurred parts
and the inspection and decision of shortage and excess of printed density simultaneously.

2.(Previously Presented) The method as set forth in claim 1 wherein the step of comparing includes a step of partitioning the monochrome images of reference and the monochrome images of inspection into parts to compare the monochrome images of inspection with the monochrome images of reference at every part.

3.(Canceled)

4.(Previously Presented) The method as set forth in claim 1 further comprising the step of generating an alarm of stained parts or blurred parts when finding stained parts or blurred parts.

5.(Currently Amended) The method as set forth in claim 1 further comprising the step of detecting positional variations of the printed paper at every page when the printed paper is fed, to compensate for the positional variations the monochrome images stored in the memory 24.

6 and 7. (Canceled)

8. (Previously Presented) The method as set forth in claim 1 further comprising the step of generating an alarm of shortage or excess of printed density when finding shortage or excess of printed density.

9-18. (Canceled)